



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,658	03/20/2002	Akira Okada	OHS-320	2777

7590 02/02/2004

Sherman & Shalloway  
413 North Washington Street  
Alexandria, VA 22314

EXAMINER
----------

NILAND, PATRICK DENNIS

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 02/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/088,658

Applicant(s)

OKADA ET AL.

Examiner

Patrick D. Niland

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14,16-23,25-28 and 30-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14,16-23,25-28 and 30-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Art Unit: 1714

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 3-5, 25-28, 30-32, and 35-36 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 301509 A1 Miyata et al..

Miyata discloses the instantly claimed dispersions using the instantly claimed hydrotalcite and their use in polymers including polyamides to give films with good antiblocking characteristics. See the abstract; page 3, lines 10-19, 44-47, and 58; page 4, lines 1-7, 17-24, and 42-58 of which the alcohols are polar organic solvents; page 5, lines 35 and 48-51; page 8, lines 31-40, particularly Sample B; and the remainder of the document. Given the other parameters of the hydrotalcite of the reference, it would appear that the reference hydrotalcite having the other properties of the instant claims would necessarily and inherently possess the instantly claimed aspect ratio of claims 3, 26 and 32.

4. Claims 1-14, 16-23, 25-28, and 30-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 301509 A1 Miyata et al. in view of EP 952189 A1 Kazuki et al..

Art Unit: 1714

Miyata discloses the instantly claimed dispersions using the instantly claimed hydrotalcite and their use in polymers including polyamides to give films with good antiblocking characteristics. See the abstract; page 3, lines 10-19, 44-47, and 58; page 4, lines 1-7, 17-24, and 42-58 of which the alcohols are polar organic solvents; page 5, lines 35 and 48-51; page 8, lines 31-40, particularly Sample B; and the remainder of the document. Given the other parameters of the hydrotalcite of the reference, it would appear that the reference hydrotalcite having the other properties of the instant claims would necessarily and inherently possess the instantly claimed aspect ratio of claims 3, 26 and 32.

It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the hydrotalcites of the prior art in a dispersion having the amount of the instant claim 2 because it is within the ability of the ordinary skilled artisan to determine the amount of hydrotalcite which can be stably dispersed in the alcohol of Miyata and maximize the amount of hydrotalcite in the dispersion for economic reasons which will be clear to the ordinary skilled artisan, including but not limited to minimizing the amount of EPA controlled, expensive organic solvents. No unexpected results are seen from the amounts of the instant claim 2. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to use the hydrotalcite of Miyata in the instantly claimed aromatic polyamides because they are disclosed for use in polyamides generically and in aromatic polyesters. It is therefore not seen that they would not be compatible with aromatic polyamides and give their known useful properties to these polymer articles containing aromatic polyamide. It would have been

Art Unit: 1714

obvious to one of ordinary skill in the art at the time of the instant invention to use the hydrotalcite of Miyata in the instantly claimed polyurethanes because they are disclosed for use in thermoplastic synthetic resins generically, of which polyurethanes are well known, and the ordinary skilled artisan would have expected the improved blocking disclosed by Miyata along with the excellent film properties of polyurethanes. It is noted that polyurethanes are a very wide category of polymers as they may be based on almost any other polymer such as polyolefins, polyacrylates, polyesters, polyamides, polyethers, etc. The compatability with polymers disclosed by Miyata ensures that these hydrotalcites will be compatible with some polyurethane, such as those based on the polymers of Miyata. It would have been obvious to one of ordinary skill in the art at the time of the instant invention to make either films or fibers from these compounds because Kazuki shows such hydrotalcite filled polymers to be useful for all molded articles. Therefore, the known benefits of hydrotalcites would have been expected in both the films and fibers of the instant claims and those encompassed by the prior art. Antiblocking would be useful in fibers because they are in fact narrow films.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Niland whose telephone number is (571) 272-1121. The examiner can normally be reached on Monday through Thursday from 10 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan, can be reached on (571) 272-1119. The fax


Art Unit: 1714

phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

pn

January 22, 2004



Patrick Niland  
Primary Examiner  
Art Unit 1714